



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2014-0561; Directorate Identifier 2014-NE-12-AD]

RIN 2120-AA64

Airworthiness Directives; Rolls-Royce plc Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain Rolls-Royce plc (RR) RB211 Trent 768-60, 772-60, and 772B-60 turbofan engines. This proposed AD was prompted by fractures of the high-pressure/intermediate-pressure (HP/IP) turbine support internal oil feed tube. This proposed AD would require inspection of the oil feed tube sealing sleeve and removal of those oil feed tube sealing sleeves that fail inspection. We are proposing this AD to prevent failure of the HP/IP turbine support internal oil feed tube, which could result in uncontained engine failure and damage to the airplane.

DATES: We must receive comments on this proposed AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Mail: Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12-140, Washington, DC 20590-0001.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

- Fax: 202-493-2251.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2014-0561; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the mandatory continuing airworthiness information (MCAI), the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Wego Wang, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7134; fax: 781-238-7199; email: wego.wang@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2014-0561; Directorate Identifier 2014-NE-12-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will

also post a report summarizing each substantive verbal contact with FAA personnel concerning this proposed AD.

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA AD 2014-0168, dated July 16, 2014 (referred to hereinafter as “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

There have been nine occurrences of high oil consumption, caused by fracture of the High/Intermediate Pressure (HP/IP) turbine support internal oil feed tube Part Number (P/N) FW45909.

The oil feed tube threaded end adaptor and sealing sleeve P/N FW15003 are designed to form a sliding joint which, if restrained, can compress the oil feed tube during thermal contraction of the turbine casing at the end of the flight cycle. On each subsequent flight, the thermal growth and contraction of the turbine casing relative to the oil tube, during the heating and cooling phases of the flight cycle, apply a load cycle to the tube, which may lead to low cycle fatigue fracture.

This AD requires removal of certain HP/IP turbine support internal oil feed tube sealing sleeves to prevent oil exhaustion that could result in uncontained engine failure and damage to the airplane.

You may obtain further information by examining the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2014-0561.

FAA’s Determination and Requirements of This Proposed AD

This product has been approved by the aviation authority of the United Kingdom, and is approved for operation in the United States. Pursuant to our bilateral agreement with the European Community, EASA has notified us of the unsafe condition described

in the MCAI. We are proposing this AD because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design. This proposed AD would require a one-time on-wing or in-shop inspection of the affected engines and removal from service of all affected P/N FW15003 oil feed tube sealing sleeves.

Costs of Compliance

We estimate that this proposed AD affects 69 engines installed on airplanes of U.S. registry. We also estimate that it would take about 8.5 hours per engine to comply with this proposed AD. The average labor rate is \$85 per hour. Based on these figures, we estimate the cost of this proposed AD on U.S. operators to be \$49,853.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States,

or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. Amend § 39.13 by adding the following new airworthiness directive (AD):

Rolls-Royce plc: Docket No. FAA-2014-0561; Directorate Identifier 2014-NE-12-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Rolls-Royce plc (RR) RB211 Trent 768-60, 772-60, and 772B-60 turbofan engines serial numbers 41693-42309 inclusive, 42313, 42318, 42319, 42320, 42328, and 42330 with high-pressure/intermediate-pressure (HP/IP) turbine support internal oil feed tube sealing sleeve part number (P/N) FW15003 installed that is marked with the prefix “B/N” followed by a six digit batch number, and does not contain the marking 102013, 112013 or 102013L.

(d) Reason

This AD was prompted by fractures of the HP/IP turbine support internal oil feed tube. We are issuing this AD to prevent failure of the HP/IP turbine support internal oil feed tube, which could result in uncontained engine failure and damage to the airplane.

(e) Actions and Compliance

Comply with this AD within the compliance times specified, unless already done.

(1) Within 6 months after the effective date of this AD, perform on-wing or in-shop inspection for, and remove from service, any affected HP/IP turbine support internal oil feed tube sealing sleeve.

(2) Remove from service any HP/IP turbine support internal oil feed tube sealing sleeve on which markings cannot be sufficiently identified to determine whether said sealing sleeve is part of the affected population.

(3) From the effective date of this AD, you may install on engines HP/IP turbine support internal oil feed tube sealing sleeves, P/N FW15003, that are marked with the prefix “B/N” followed by a six digit batch number, provided that the part is marked with 102013, 112013 or 102013L.

(f) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, FAA, may approve AMOCs to this AD. Use the procedures found in 14 CFR 39.19 to make your request.

(g) Related Information

(1) For more information about this AD, contact Wego Wang, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7134; fax: 781-238-7199; email: wego.wang@faa.gov.

(2) Refer to MCAI European Aviation Safety Agency AD 2014-0168, dated July 16, 2014, for more information. You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2014-0561.

Issued in Burlington, Massachusetts, on September 9, 2014.

Richard P. Warren,
Acting Assistant Directorate Manager, Engine & Propeller Directorate,
Aircraft Certification Service.

[FR Doc. 2014-22351 Filed 09/17/2014 at 8:45 am; Publication Date: 09/18/2014]